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# BECOMING AVATAR: CO-CREATING GIRL'S PHYSICAL EDUCATION KIT ON 3D GAMING BODIES

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## **Abstract**

For almost four decades, research within the field of physical education (PE) pedagogy has studied girls' disengagement. Findings from these studies have highlighted several barriers to engagement such as the kit. The exploration of how PE kits affect young girls has not been widely researched within the social sciences and therefore, a gap in the literature has been identified. This pilot study, which is part of a wider PhD project, seeks to understand how the uniformed body affects girls' felt experiences of PE. The kits worn for PE can be viewed as a means to discipline and control the body. Therefore, by giving power and agency back to girls to re-design the materiality of their PE kit, an improvement in engagement within PE may occur. A new materialist co-creative methodology was developed that applied fashion design principles and 3D video gaming to enable girls to re-imagine their school PE kit. Using print design on custom-made content for the SIMS 4 video game, four girls ages 10 -14 re-designed their school kit and wore them virtually in the game. The findings showed that using a co-creative approach, incorporating fashion design and video game avatars, to help facilitate the design of a kit relevant to the girls does have the potential to engage girls within school PE lessons. It is suggested that for more robust and conclusive findings, a larger study should be undertaken in UK secondary schools.

## **Keywords**

Physical Education, Virtual Fashion, Gaming, Agency, Affect

## **Introduction**

This paper is part of a wider interdisciplinary PhD project focusing on the re-imagining of school physical education experiences for teenage girls through new materialist affect theory.

For almost four decades, research within the field of physical education (PE) pedagogy has studied girls' disengagement within PE lessons (Scraton, 1989; Flintoff and Scraton, 2001; Oliver and Kirk, 2015). These studies have used a post-structuralist epistemological focus on performativity (Butler, 1990) and power and resistance (Foucault, 1975) to deconstruct gender through language, discourse and meaning. Through this focus researchers have developed socio-critical activist methodologies involving teenage girls (Oliver and Kirk, 2015), that give them a voice to change parts of their PE experiences for the better. Although some change has occurred by using these methods, many teenage girls still do not engage within school PE.

Therefore, this study shifts the position away from language to that of matter and re-focuses attention to what Barad (2003) calls intra-actions. The concept of intra-action would suggest that teenage girls are in constant flux with human and non-human matter in their everyday experiences of PE, and that this matter has the capacity to produce affect. In order to understand this better, the study looks to the material spaces and the PE kit as objects that do things (Bennett, 2010) and asks what these material things do to influence teenage girls affective, discursive and material contexts of Physical Education.

## **The uniformed body, fashion and affect**

School uniforms, including PE kits, have been described as being a way to convey the values, beliefs, ethics, traditions and identity of a school (Wilken and Aardt, 2012). It has also been suggested that they act as a social equaliser, to promote inclusion and solidarity (Wilken and Aardt, 2012). In contrast, school uniforms can be viewed as a site of power and surveillance and as a means for schools to monitor and observe the wearer of the uniform (Craik, 2003). Many feminist authors have considered uniform polices for girls and the wearing of skirts or dresses troublesome,

particularly as it is often assumed that the girl wearing the skirt/dress is cisgender (Wolfe and Rasmussen, 2020).

From a wider physical culture context, media and technologies are shaping girls' experiences of their health and bodily practices. Teenage girls are classed as consumers for latest trends in both fashion and beauty. Francombe (2014) suggests that 'through the consumption and application of 'product' the young female engages in aestheticised recreation as a form of leisure'. Unlike the branded or sports style clothing that teenage girls are particularly drawn to outside of school, PE uniforms do not have an aesthetic focus. Instead, the school PE kit is designed, as Craik (2003) suggests, 'to produce a certain array of body techniques. Swain (2002) argues that school uniform can confirm gender hierarchies and, therefore, gendered identity. For example, the skort, a piece of material fabric that functions as a short but has the appearance of a skirt, imposes an agency of its own onto girls' bodies in its reinforcement of the 'feminine'. Ringrose and Rawlings (2015) suggest 'the wearing of skirts as uniform is a school and social requirement, an object of academic- social and gendered legitimisation'. They propose 'there is no choice for girls but to operate within the relations of power that the skirt dictates, with the power to read sexual intentionality onto girls.

## **Methodology**

To understand further the complexities of teenage girl's navigation of school and PE, the methodology focused on revealing the affective capacities of the PE kit as one part of the girl's experience through material-discursive intra-actions (Barad, 2003). It explored how the material and relational practice of co-creation with art and design could disrupt existing knowledge and help girls reimagine their PE lessons.

Due to COVID 19 restrictions, the pilot study took place remotely using Microsoft Teams.

## Sample size

The sample consisted of four girls from various schools in the South West of England. Arabella in year 5 primary, Taya in year 8 secondary, Rachel in year 9 secondary and Ellie in year 10 secondary.

## Ethics

Full ethical approval was sought to carry out the pilot study, and full consent and assents was given by the participants and their parents/carers before commencement. Pseudonyms were given to the participants to ensure anonymity. The sessions were recorded within Microsoft Teams.

The session was broken down in to three parts.

1. Visual flash cards of the girls' current PE kit versus trend driven sportswear were used (figure 1) to invoke affective reactions and encourage discussion.
2. Guided questions and flash cards with words and pictures depicting how the PE kit feels on the body were also used as a way for the girls to articulate how they feel.
3. The participants were then asked to re-design their PE kits using the whiteboard on Microsoft TEAMS, which would later be made into custom content for a SIMS 4 avatar for them to discuss with the researcher.

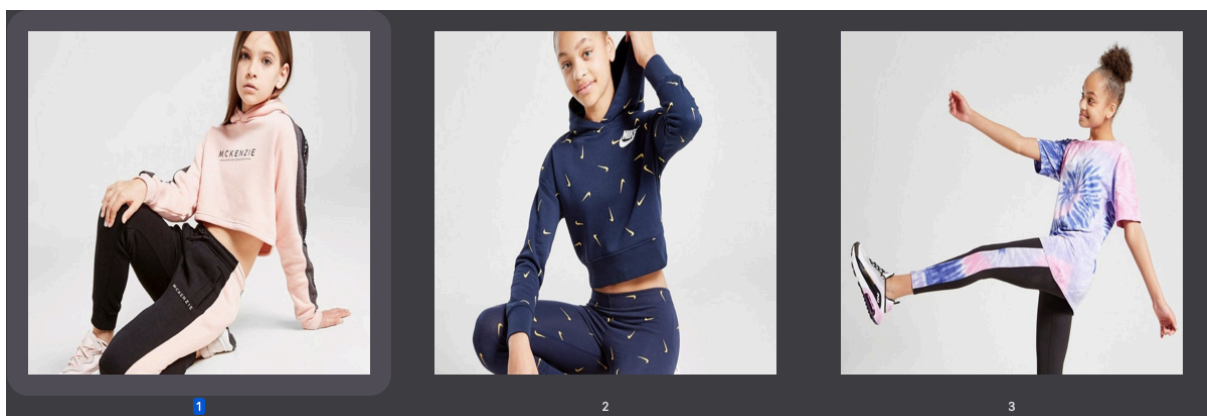


Figure 1: PE kit visual flash cards (JD Sports, 2020)

## Results and discussion

The PE kit can be viewed as dynamic matter (Wolfe, 2017) that entangles with the body in an affective assemblage. Building upon Deleuze and Guattari's (1988) work in *A Thousand Plateaus*, De Landa (2016), describes assemblages as the emerging parts of a whole. Each of the girls who took part in the study told their story through narrative and visuals of both individual and relational embodied encounters with the kit. The emergence of affects was dependent on several elements within the assemblage, including where the kit is worn, what activities are being performed and who is in the same spaces where the kit is worn.

Whilst Taya (13), Rachel (14) and Ellie (14), all in secondary school, experienced some form of negative felt bodily affect when wearing the kit, the youngest participant Arabella, did not feel any negative impact of how the PE kit felt on her body, rather the negativity she did feel was towards the kits' aesthetic design.

*"It feels actually very nice, so I would keep the materials the same. It's just the way it looks. I think the materials are very good, I just really don't like plain things, I would add more personalisation, I would feel happier, I would feel more like me".*

This suggests that, to Arabella the composition of the garment means more to her and comes to matter when it has defining characteristics of who she is. She feels whole when something has been personalised with distinctive features.

Ellie, Rachel and Taya's relationship with the PE kit and how it affected them was more complex, as it was co-dependent on the spaces within their secondary schools in which they were wearing the kit. Aesthetics also played an important part for the three girls when it came to the look and style, however it was also evident that the feeling of the kit on the body created intensities and changes that altered their sense of corporality. For Ellie, this complexity was further intensified as she did not regularly engage within PE lessons and either forgot her kit or sat out on the benches. On describing how she felt when wearing her kit, Ellie said how she preferred the older style of leggings which were plain black.

*“I really hate the look of the new leggings; they just don’t look nice with the school branding’.*

Ellie also mentioned the way the clothing fits on her body, saying that she felt self-conscious wearing the kit even when she was sitting on the benches in the sports hall. She explained that the kit draws attention to the fact that the girls all have different body shapes due to its uniformed aesthetic; she revealed that this was because of the way in which the kit exposes her size, suggesting that she felt some form of body stigma at certain times.

For Taya, the experience of the kit was very different. Her school kit comprised of a compulsory skort. Although she did not mind the look of the skort, she did say that it was very short and tight which sometimes made her feel uncomfortable. Circumstantially, this only occurred in the changing room space.

*“I sometimes get a bit embarrassed by my legs. It’s like I have quite skinny legs and arms and sometimes I do feel exposed with them being out.”*

Rachel’s experience of the kit had multiple affective levels, on one hand she was unhappy with the aesthetic of the kit including size and shape, remarking that the top was far too long and the jumpers they have to wear made her look and feel shapeless. However, there was also another level to her experience that included material-discursive connotations implied by the rules of the uniform policy and media scaremongering over girls’ dignity when wearing leggings or skorts. This experience is similar to the findings within Ringrose and Rawlings (2015) and the way in which the agency of the skirt has discursive inferences to the sexualisation of girls. These connotations place onus on girls to cover up their bodies to prevent male gaze and other consequences, such as rape culture (BBC News, 2021).

*“So, we have this rule where we have to wear a skort over our leggings because it’s distracting apparently and the skorts are tiny. So, you can either wear a skort, just a skort, which is tiny, and no one likes it, or you have to wear leggings with a skort over the top because it’s too distracting, which we all find irrational. So, I just wear my leggings and it’s really, it’s like really down putting when Miss goes can you put your skort on because it’s too distracting” (Rachel).*



## Re-Imagining the Kit

Branded sportswear such as Nike, Adidas and Puma are a staple uniform for many of today's young people, particularly as they are synonymous with celebrities in popular youth music cultures. Many young people place importance on displaying labels and being noticed in branded clothing (Swain, 2002).

*"We always used to wear Nike leggings or Puma. The brand name leggings you can wear them on the weekends and wear them when you go out with your friends and they are just normal leggings, but you can't do that with the school ones. I like branded leggings" (Ellie).*

The older girls in this study were avid followers of TikTok and Instagram influencers in fashion and beauty including Selena Gomez, seen in figure 2 wearing Puma. Taya and Ellie were both impacted by the look of the PE kit and chose to re-design their kits in keeping with fashion sportswear brands. They particularly liked the idea of designing a kit that you could also wear outside of school. Ellie chose to make the school logos less obvious and smaller in placement. She also kept the re-design of her kit in keeping with branded sportswear such as Nike and Adidas, choosing to opt for a more cropped version of her PE kit top with recognisable Adidas branding down the sides and a smaller placement of the school logo on the leggings. This interesting finding shows a loyalty to commercial fashion/sportswear companies rather than the school, being more comfortable to identify as fashion consumers than school pupils.



Figure 2: Singer Selena Gomez modelling for Puma (Puma, 2021)

Taya decided to design a pair of leggings instead of a skort, with the name of the school going down the leg in a sporty font. She also went for a more cropped version of a t-shirt opposed to the compulsory polo top in her school kit. Rachel's design (Figure 3) completely revamped the kit using colour blocking in black and red with a simplistic aesthetic, and shorts instead of a skort. Sizes were requested in both male and female sizes in the PE top and hoodie, suggesting that the aesthetic of the design would be suitable for both girls and boys.



Figure 3: Rachel's re-designed kit

Arabella, the youngest, designed her own personalised logo for the PE kit t-shirt using a heart shape and tree silhouettes to represent the school. She was expressive and comfortable experimenting with shape and colour.

When it came to the designs being shown on their individual 3D avatars (see example in Figure 4), all girls were surprised and excited about the way their own designs looked. Taya and Ellie, in particular, liked the idea of having a mix and match PE kit that they could swap out pieces and wear them in different contexts. Although Ellie suggested that the kit may not increase her engagement in PE, she did say that she would wear the kit more often, suggesting she would feel more comfortable wearing her design. The girls liked the way the avatars mirrored

themselves, pointing out similarities of hair and facial features, they also said that the clothing looked 'nice' on their avatar bodies.



Figure 4: Ellie's avatar

## Conclusion

The materiality of girls' PE experiences is an assemblage of many elements that create experience. One of the elements is the PE kit, which has the capacity to affect in a multitude of ways. An interesting finding from this pilot study is the way in which shared relational experience with aesthetics influence the way in which girls feel about the clothing they wear to perform sports or PE. The cultural habit and repetition (Eckersley and Duff, 2020) of wearing a uniformed identifiable brand such as Nike or Adidas is something that connects these girls to a material-discursive practice of becoming. Furthermore, each girl is mutually connected by their relationship with the repetition or habit of wearing a PE uniform and a yearning for difference or the possibility of new material experiences. As Smelik (2015, p.167) suggests, 'becoming is a practice of change and of repetitions with a difference'. This



The next stage of the project will be in a state secondary school and will focus

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